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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,840	12/28/2006	Adrian Chludek	GKNG 1286 PCT	7452
27256	7590	01/23/2009	EXAMINER	
Dickinson Wright PLLC 38525 Woodward Avenue Suite 2000 Bloomfield Hills, MI 48304			LE, DAVID D	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/576,840	Applicant(s) CHLUDEK, ADRIAN	
	Examiner David D. Le	Art Unit 3655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/28/08, 04/20/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the first Office action on the merits of Application No. 10/576,840, filed 28 December 2006. Claims 1-17 are pending.

Documents

2. The following documents have been received and filed as part of the patent application:
 - Information Disclosure Statement, received on 10/28/08
 - Declaration and Power of Attorney, received on 12/28/06
 - Information Disclosure Statement, received on 04/20/06
 - Copy of Foreign Priority Document, received on 04/20/06

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

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4. The abstract of the disclosure is objected to because it exceeds 150 words. Correction is required. See MPEP § 608.01(b).

Claim Objections

5. Claim 1 is objected to because of the following informalities:

- Line 3, “its longitudinal axis” should be --a longitudinal axis--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1:

- Line 11 recites the limitation "the second one of the sideshaft gears". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. **Claims 1-6 and 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent No. 5,611,746 to Shaffer (hereinafter referred to as Shaffer).**

Claims 1-6 and 12-16:

Shaffer (i.e., Fig. 1; column 3, line 31 – column 7, line 39) discloses a vehicle drive train comprising:

- A differential carrier (i.e., Fig. 1, element 24) for a differential drive, which differential carrier is supported so as to be rotatably drivable around a longitudinal axis (i.e., Fig. 1, element A);
- Sideshaft gears (i.e., Fig. 1, elements 124 and 126) which are supported in the differential carrier so as to be coaxially rotatable around the longitudinal axis;
- Differential gears (i.e., Fig. 1, elements 132) which are supported in the differential carrier on axes of rotation positioned radially relative to the longitudinal axis and which meshingly engage the sideshaft gears;
- A multi-plate coupling (i.e., Fig. 1, element 32) arranged in the differential carrier so as to extend coaxially relative to the longitudinal axis (A) and to be effective between a first one of the sideshaft gears and the differential carrier, or a second one of the sideshaft gears;

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- Wherein the differential carrier is formed of a dish-shaped part (i.e., Fig. 1, element 38 and the portion that supports the ring gear 44) comprising a base (i.e., Fig. 1, being the portion of the differential carrier 38 that supports the ring gear 44) and an integrally formed-on flange (i.e., Fig. 1, where bolts 43 are inserted therethrough), and a cover (i.e., Fig. 1, element 70) which is inserted into the dish-shaped part and which is axially fixed by an annular securing element (i.e., Fig. 1, element 40);
- Wherein the cover and the multi-plate coupling, with reference to a plane extending through the axes of rotation of the differential gears, are positioned in the differential carrier on a side located opposite the base and the flange (i.e., Fig. 1);
- Wherein the flange is arranged so as to substantially axially overlap the base of the dish-shaped part (i.e., Fig. 1);
- An actuating device (i.e., Fig. 1, being the pump assembly 48 and piston assembly 72) for actuating the multi-plate coupling;
- Wherein the actuating device is arranged inside the differential carrier (i.e., Fig. 1);
- Wherein the actuating device is a differential-speed-sensing device (i.e., column 3, line 45 – column 5, line 36);
- Wherein a housing of the differential-speed-sensing device is at least partially formed by the cover of the differential carrier (i.e., Fig. 1);

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- Wherein the annular securing element is a locking ring which is positioned in an annular groove (i.e., Fig. 1, being the annular groove where element 40 being inserted into element 38) in the dish-shaped part.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 7-9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer in view of U. S. Patent Application Publication No. US 2002/0077212 to Krisher (hereinafter referred to as Krisher).

Claims 7-9 and 17:

Shaffer discloses the limitations as set forth above. Regarding claims 7-9 and 17, Shaffer lacks:

- Wherein the actuating device is arranged outside the differential carrier;
- Wherein the actuating device is a ball ramp setting device; and
- Wherein the ball ramp setting device is supported on a sleeve projection at the cover of the differential carrier.

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Krisher (Figs. 1-5; paragraphs [0026] - [0043]), on the other hand, teaches a differential gear assembly comprising:

- An actuating device (i.e., Fig. 1, being a combination of elements including 12, 13, 14, 15 and 22);
- Wherein the actuating device is arranged outside the differential carrier (i.e., Fig. 1);
- Wherein the actuating device is a ball ramp setting device (i.e., Fig. 1); and
- Wherein the ball ramp setting device is supported on a sleeve projection at the cover of the differential carrier (i.e., Fig. 1).

Since all the claimed elements were known in the prior art, one skilled in the art could have substituted the elements as claimed by known methods with no change in their respective functions, and the substitution would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Allowable Subject Matter

12. Claims 10 and 11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Krzesicki et al. (U. S. Patent No. 6,805,653) teaches a differential gear assembly, as shown in Fig. 2.
- Johansson (U. S. Patent No. 5,087,228) teaches a differential gear assembly, as shown in Fig. 1.
- Sullivan et al. (U. S. Patent No. 4,445,400) teaches a differential speed limiting device, as shown in Fig. 1.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Le whose telephone number is 571-272-7092. The examiner can normally be reached on Mon-Fri (0900-1730).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David D. Le/
Primary Examiner, Art Unit 3655
01/19/2009

ddl